

**UNITED STATES DEPARTMENT OF INTERIOR
NATIONAL PARK SERVICE**

IN THE MATTER OF:

**MORNING STAR MINE SITE
MOJAVE NATIONAL PRESERVE
SAN BERNARDINO COUNTY, CA**

**VANDERBILT GOLD
CORPORATION;
MINERAL, METAL & MINING
MANAGEMENT LTD.,
Respondents.**

**U.S. Department of the Interior
National Park Service**

**Proceeding under Sections 104, 107 and
122 of the Comprehensive
Environmental Response,
Compensation, and Liability Act, as
amended, 42 U.S.C. §§ 9604, 9607 and
9622**

**ADMINISTRATIVE ORDER ON CONSENT
FOR REMOVAL ACTION**

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Order on Consent for Removal Action ("Order") is entered into voluntarily by the United States Department of the Interior acting through the National Park Service ("DOI" or "NPS") with respondents, Vanderbilt Gold Corporation ("VGC"), and Mineral, Metal & Mining Management Ltd., a Nebraska Limited Partnership ("4EM") ("Respondents"). This Order provides for the performance of a Removal Action by 4EM and the reimbursement of response costs incurred by the DOI in connection with the Morning Star Mine (the "Site"), located in the Mojave National Preserve, a unit of the National Park System. This Order requires 4EM to conduct the Removal Action described herein to protect the public health or welfare or the environment from the actual

or threatened release of hazardous substances, pollutants, or contaminants at or from the Site through the beneficial reuse of reclassified heap leach material on the Site.

2. The Department of the Interior issues this Order pursuant to the authority vested in the President of the United States by sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9607 and 9622, as amended ("CERCLA"). This authority is delegated to the Secretary of the Interior by Executive Order 12580, January 23, 1987, 52 Federal Register 2923, as amended by Executive Order 13016, August 28, 1996, 61 Federal Register 45871. The authority of the Secretary to issue this Order is further delegated to the Director of the National Park Service and to the DOI Solicitor pursuant to 207 Departmental Manual 7.3 (January 2, 2001).

3. NPS has notified the State of California, Lahontan Regional Water Quality Control Board, San Bernardino County, and the State of California, Department of Conservation ("DOC"), Office of Mine Reclamation, of this action.

4. The DOC has issued CA MINE ID: 91-36-0114 for this Site. VGC has entered into an agreement with 4EM whereby it leases the heap leach material to 4EM which 4EM will then detoxify, assume title to, and sell as construction material.

5. Respondents' participation in this Order shall not constitute or be construed as an admission of liability or of the findings or determinations contained in this Order except in a proceeding to enforce the terms of this Order. Respondents agree to comply with and be bound by the terms of this Order as it applies to each of them. Respondents further agree that they will not contest the basis or validity of this Order or its terms.

II. PARTIES BOUND

6. This Order applies to and is binding upon NPS and upon Respondents and Respondents' successors and assigns. Any change in ownership or corporate status of Respondents including, but not limited to, any transfer of assets or real or personal property shall not alter Respondents' responsibilities under this Order. Except as provided herein, Respondents are jointly and severally liable for performance of the obligations required by this Order. However, by agreement of the Parties, 4EM will take primary responsibility for implementing the Work Plan and providing financial assurance for the Work, as defined herein, and for performing associated activities and obligations as specifically noted in this Order. 4EM is entering into this Order for the purpose of implementing a Removal Action on behalf of VGC under this Order, and, except as specifically provided herein, is not consenting to any liability or responsibility under the above-referenced CERCLA provisions. Should 4EM not fully perform the obligations for which it has assumed primary responsibility under this Order, in addition to the remedies provided herein with reference to 4EM, the NPS retains its full authority to proceed against VGC under this Order and under CERCLA.

7. Each Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Order and comply with this Order. Each Respondent shall be responsible for any noncompliance with provisions of this Order applying to it, whether individually, jointly or severally.

III. DEFINITIONS

8. Unless otherwise expressly provided herein, terms used in this Order, which are defined in CERCLA or in regulations promulgated under CERCLA, shall have the meaning assigned to them in the statute or its implementing regulations. Whenever terms listed below are used in this Order or in the documents attached to this Order or incorporated by reference into this Order, the following definitions shall apply:

- a. "Action Memorandum" shall mean the decision document issued by the NPS on June 9, 2003 selecting an off-Site removal alternative proposed by 4EM for the Site.
- b. "AOC" shall mean this Administrative Order on Consent and all referenced and attached documents. In the event of conflict between the terms in the body of this Administrative Order on Consent and any such document, the former shall control.
- c. "Board" shall mean the State of California, Lahontan Basin Regional Water Quality Control Board.
- d. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9601, *et seq.*
- e. "County" shall mean the County of San Bernardino.
- f. "Day" shall mean a calendar day. In computing any period of time under this Order, when the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.
- g. "Detoxify" shall mean the method(s) by which the Board's Discharge Specifications for the liquid and solid portions of the heap leach pads and associated solution(s) are achieved.
- h. "Detoxified material" shall mean that heap leach material which has achieved the Board's Waste Discharge Requirements for residual Total, WAD and Soluble cyanide values in the liquid and solid process waste fractions in any leach pad or solution pond as set forth in the Board Order Nos. 6-89-170, 6-89-170A1, and 6-89-170A2.
- i. "Discharge Specifications" and "Waste Discharge Requirements" shall mean the levels of Total, WAD and Soluble Cyanide in wastewater or any material containing cyanide as

defined in Board Order No. 6-89-170, or any amendment to said Order.

j. "EE/CA" and "Engineering Evaluation/Cost Analysis" shall mean that document titled, *Engineering Evaluation and Cost Analysis*, dated November 26, 2002 which discusses and compares removal alternatives for the Site, which is incorporated by reference as a part of this Order.

k. "Effective Date" shall be the Effective Date of this Order as provided in Paragraph 107.

l. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

m. "Final Product" shall mean the heap leach material from pads No. 1 and No. 2 that has been detoxified so as to meet the Board's Waste Discharge Specifications and has been reclassified by the Board from Group B to Group C mining waste or as unregulated, and through the on-Site sampling and analytic procedures set forth in the Work Plan(s) as provided in Paragraphs 32 - 36, below, has been confirmed to be safe and otherwise suitable for removal and sale as construction material.

n. "Future Response Costs" shall mean all costs that the United States incurs subsequent to those defined as Past Response Costs, including, but not limited to, direct and indirect costs, in reviewing or developing plans, reports and other items pursuant to this Order, verifying the Work, or otherwise implementing, overseeing, or enforcing this Order, including, but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, and the costs incurred pursuant to Paragraph 101 (additional removal action) and Paragraph 82 (work takeover). Future Response Costs shall include costs associated with collection and analysis of split samples, inspection of documents and field activities, coordinating with federal and state agencies and the public, and holding meetings.

o. "Group B Mining Waste" shall mean mining wastes that consist of or contain nonhazardous soluble pollutants of concentrations that exceed water quality objectives for, or could cause, degradation of waters of the State as defined in Section 22480(b)(2) of Article 1, Subchapter 1, Chapter 7, Subdivision 1, Division 2, Title 27, California Code of Regulations.

p. "Group C Mining Waste" shall mean mining wastes from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity as defined in Section 22480(b)(3) of Article 1, Subchapter 1, Chapter 7, Subdivision 1, Division 2, Title 27, California Code of Regulations.

q. "Interest" shall mean interest at the rate specified for interest on investments of the Hazardous Substance Superfund as specified in 42 U.S.C. § 9607(a), compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

r. "National Contingency Plan" or "NCP" shall mean the National Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, including any amendments thereto.

s. "Paragraph" shall mean a portion of this Order identified by an Arabic numeral.

t. "Parties" shall mean the Department of the Interior ("DOI"), acting through the National Park Service ("NPS"), and Respondents.

u. "Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid or incurred in connection with the Site through September 30, 2004, plus Interest on all such costs through such date.

v. "Office of Mine Reclamation" and "DOC" shall mean the Office of Mine Reclamation, California Department of Conservation.

w. "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. § 6901, *et seq.* (also known as the Resource Conservation and Recovery Act).

x. "Reclassify" shall mean the action of the Board to revise the designation of the heap leach pad materials from Group B mining waste to Group C mining waste, or to unregulated status, based upon the request of 4EM and on the results of an approved sampling/analytic plan for detoxification of the heap leach pad materials and associated solution(s).

y. "Removal Action" shall have the meaning assigned to it in CERCLA and its implementing regulations and shall include those activities defined as "Work," to be undertaken by 4EM under this Order.

z. "Respondents" shall mean VGC and 4EM.

aa. "Sampling and Analysis Plan(s)" (SAP) shall be included as part of the Work Plan defined below. The SAP shall describe the procedures and strategy for obtaining the information required to characterize the heap leach materials as Group C mining wastes, or as unregulated, and to confirm that any material characterized by 4EM as Final Product meets the definition of Final Product before it leaves the Site. In addition, the SAP shall include the procedures and analyses to be used to determine whether all clean up levels in the Work Area, including, but not limited, to the areas beneath the footprints of the heap leach pads and the pregnant solution pond, have been met. The SAP shall include a Quality Assurance Project Plan.

bb. "Section" shall mean a portion of this Order identified by a Roman numeral and includes one or more Paragraphs.

cc. "Site" shall mean the Work Area and other areas affected by mining operations, including the waste rock piles, the pit, and various building and other improvements.

dd. "SMARA" shall mean the Surface Mining and Reclamation Act of 1975, Public Resources Code, Division 2, Chapter 9, Section 2710 *et seq.* administered by the California Department of Conservation, Office of Mine Reclamation, and San Bernardino County as "Lead Agency."

ee. "Statement of Work" or "SOW" shall mean Attachment A to this Order, which provides a general description of the activities that will be undertaken to implement the Removal Action. The SOW is incorporated into this Order and is an enforceable part of this Order. The Work Plan(s) will be prepared by 4EM and submitted to NPS for review, amendment and approval, or disapproval to provide additional details regarding implementation of those activities described in the SOW.

ff. "Total Cyanide" as analyzed in the solid portion of the leach pad material shall mean total cyanide as determined by ASTM Method D2036-81A.

gg. "Waste Classification" shall mean mining waste as classified under Section 22480(b) of Article 1, Subchapter 1, Chapter 7, Subdivision 1, Division 2, Title 27, California Code of Regulations.

hh. "Waste Material" shall mean 1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); 2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); 3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and 4) any "hazardous material" as that term is defined under California law.

ii. "Weak Acid Dissociable (WAD) Cyanide" shall mean free cyanide as determined by

ASTM Method D2036-81A.

jj. "Work" shall mean all activities described in the NPS-approved Work Plan(s), the SOW, the Action Memorandum, the Engineering Evaluation and Cost Analysis (EE/CA) and any relevant orders from the Board.

kk. "Work Area" shall mean the portion of the Site to be utilized by 4EM in performing the Work, as shown in the diagrams and maps approved as a part of the final Work Plan(s). This area, in general, encompasses heap leach pad No. 1, heap leach pad No. 2, equipment and processing staging area north of pad No. 1, the pregnant solution pond, and certain areas outside the Site, including the mine access road, the valley wells located adjacent to the Morning Star Mine Road and the associated pipeline from the wells to the mine area.

ll. "Work Plan(s)" shall mean the detailed plan(s) of activities for implementing the requirements of this Order and the SOW. 4EM shall submit to NPS for review, amendment and approval, a proposed Work Plan within 45 days of the effective date of this Order. Upon final approval of the Work Plan by the NPS, the Work Plan shall form a part of this Order and be enforceable as such. The Work Plan(s) may be amended by subsequent Work Plans which 4EM shall submit to NPS for review, amendment, and prior approval, before implementing any such amendments.

IV. FINDINGS OF FACT

9. The Morning Star Mine is an inactive open pit mine with related rock dumps, heap leach pads, and other equipment, improvements, and materials located on the eastern slope of the Ivanpah Mountains in Section 28 of Township 15 North, Range 14 East, SBB&M in Mojave National Preserve.

10. Access to the mine property is provided by approximately 8 miles of paved roads and 3.5 miles of unpaved roads from the Morning Star Mine Road to the Site, all within the Mojave

National Preserve managed by the NPS.

11. The two heap leach pads and pregnant solution pond for the Morning Star Mine addressed in this Order are located on unpatented lode mining claims currently held by Respondent, VGC.

12. The mine was initially operated as an underground mine, producing high-grade ore that was processed off site. In 1984, the method of mining and processing was changed to an onsite heap leach pad system. This system consisted of a lined heap leach pad (Pad No. 1), which drained to a lined pregnant solution pond (PSP), and a gold recovery facility that included carbon columns. Pad No. 1 is roughly 15 acres in size and contains approximately 1,215,171 tons of material. In 1989, a second lined heap leach pad (Pad No. 2) was constructed. This pad was constructed with a modified solution storage and collection system integrated into the bottom of the pad (no gravity drain). Pad No. 2 is roughly 13 acres in size and contains approximately 545,177 tons of material.

13. With the cessation of processing operations in 1992, meteoric inflow added to the volume of solution impounded by the liner within Pad No. 2. As a consequence, the solution level within Pad No. 2 rose and overtopped the liner in several locations following precipitation events.

Furthermore, it was observed that the liner for the PSP was no longer intact. In addition, erosional failures of the steep slopes associated with the heap leach pads were observed. The potential for these erosional failures to grow significantly and lead to significant failures within the heap leach pads was high.

14. Water samples were collected from the bottom of the open pit, Pad No. 1, the PSP, the leak detection system for the PSP, the leachate collection system and leak detection system from Pad No. 2 and standing water on the perimeter of Pad No. 2. Analyses confirmed that water from the vicinity of the two pads and leachate contained within the pads exceeded the Board's discharge limits for total cyanide and weak acid dissociable (WAD) cyanide. The maximum concentration of total cyanide detected in surface water was 8.9 milligrams per liter; the Board discharge limit was 1.0 milligrams per liter. The maximum concentration of WAD cyanide detected in surface

water was 2.1 milligrams per liter; the Board's discharge limit was .2 milligrams per liter.

15. The analyses of pad soil samples indicated elevated levels of total and WAD cyanide, beryllium, cadmium, cobalt, copper, lead, molybdenum, and zinc. However, lead was the only soil contaminant present at concentrations in excess of regulatory standards. The maximum concentration of lead detected in soil was 1,160 milligrams per kilogram; the California hazardous waste total threshold limit concentration for lead is 1,000 milligrams per kilogram.

16. NPS determined that these conditions posed a threat to the public health, welfare, or the environment within the meaning of section 104(a)(1) of CERCLA, 42 U.S.C. § 9604(a)(1), and as a consequence, it initiated a time critical removal action in 2002.

17. The Morning Star Mine is not listed or proposed for listing on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B.

18. On June 13, 2000 Respondent, 4EM, a Nebraska corporation, entered into a Grant of Exploration Rights and Option to Lease Agreement ("Lease") with VGC to lease heap leach Pads No. 1 and No. 2 at the Morning Star Mine Site and to occupy other portions of the Site in order to process the pad materials for sale as construction materials.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, and the Administrative Record supporting this Removal Action, NPS makes the following Conclusions of Law and Determinations:

19. The Morning Star Mine Site is a "facility" as defined in section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

20. The contaminants found at the Site, as identified in the Findings of Fact above, include "hazardous substance(s)" as defined by section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

21. Each Respondent is a "person" as defined in section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

22. Respondent VGC is the "owner" and/or an "operator" of the facility, as defined by section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1). Respondent VGC is therefore a responsible party under section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is jointly and severally liable for performance of response actions and for payment of all response costs incurred and to be incurred at the Site.

23. 4EM represents, and for the purposes of this Order, NPS relies on those representations, that it has conducted no activities on the Site that would make it liable under CERCLA as of the effective date set forth in Paragraph 107. However, by exercising its rights under the Lease with VGC, 4EM might expose itself to liability as an owner, and/or operator, and/or arranger for disposal, and/or transporter under section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

24. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the facility as defined by sections 101(22) of CERCLA, 42 U.S.C. § 9601(22).

25. The Removal Actions required by this Order are necessary to protect the public health, welfare, or the environment, are in the public interest and are not inconsistent with the NCP or CERCLA.

VI. ORDER

26. Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the Administrative Record for this Site, it is hereby ordered and agreed that Respondents shall comply with the provisions of this Order including, but not limited to, all attachments to this Order, and all documents incorporated by reference into this Order.

VII. DESIGNATION OF PROJECT COORDINATOR AND ON-SCENE COORDINATOR

27. Respondent 4EM shall perform the Removal Action required by this Order and shall notify NPS of the name and qualifications of the person who will be supervising the Work within 15 days of such person's designation from time to time during the term of this Order. NPS retains the right to disapprove of any, or all, such persons.

28. Within 30 days after the Effective Date, Respondent 4EM shall designate a Project Coordinator who shall be responsible for administration of all of the Respondent's actions required by the Order. Respondent shall submit the designated Coordinator's name, address, telephone number, and qualifications to NPS. The Project Coordinator shall be present at the Site or readily available during Site Work. NPS retains the right to disapprove of any Project Coordinator named by the Respondent. If NPS disapproves of a selected Project Coordinator, Respondent 4EM Company shall retain a different Project Coordinator and shall notify NPS of that person's name, address, telephone number, and qualifications within 30 days following NPS' disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from NPS relating to this Order shall constitute receipt by Respondent.

29. NPS has designated Peter Guria, Chief, Emergency Response Section, EPA, Region 9, his successor or designee, as its On-Scene Coordinator (OSC). Respondents shall direct all submissions to the OSC at U.S. EPA, Mail Code SFD-6, 75 Hawthorne St., San Francisco, CA 94105. The NPS has designated Larry Whalon as its Project Coordinator. All correspondence

directed to the NPS shall be sent to him at Mojave National Preserve, 222 E. Main Street, #202, Barstow, CA 92311.

30. NPS and 4EM shall have the right, subject to Paragraph 28, to change their designated OSC or Project Coordinators. Respondent shall notify NPS 5 days before such a change is made. The initial notification may be orally made but a written notice shall promptly follow it.

31. The OSC shall be responsible for overseeing 4EM's implementation of this Order. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any Work required by this Order, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of Work unless specifically directed by that person.

VIII. WORK TO BE PERFORMED

A. Work Plans and Implementation

32. 4EM shall perform the Removal Action, on behalf of the Respondents, as specified in the Work Plan(s), the Statement of Work, the EE/CA, the Action Memorandum and any relevant orders from the Board. Within 45 days of the effective date of this Order, 4EM shall submit for NPS review, amendment and approval, a proposed Work Plan(s), containing a SAP, as to how it proposes to addresses all elements of the SOW. In addition to the provisions in the Work Plan(s), 4EM shall:

a. Provide evidence to NPS that all applicable County, State and federal permits and licenses have been applied for and obtained, and all necessary employee training related to hazardous substance handling has been conducted prior to commencement of the corresponding activity to which such permit, license, and/or training pertains. A list of such permits, licenses, and training, along with a schedule for making application for the permits and licenses and/or providing the training, shall be provided in the Work Plan(s).

b. Prior to transporting any materials off-Site, provide written evidence to NPS that any

required road use and maintenance agreement has been obtained from the County.

c. Prior to commencement of on-Site Work, provide evidence that all applicable financial guarantees have been obtained with named beneficiaries as directed by the NPS and other applicable agencies.

d. Pursuant to the Endangered Species Act, prior to commencing any on-Site Work, prepare a draft biological assessment for the NPS on the impacts, if any, on desert tortoise and on any other species listed under the Endangered Species Act that may result from the Work and implement mitigating measures for such species in accordance with any Biological Opinion issued by the U.S. Fish and Wildlife Service.

e. Construct and install measures for safe ingress and egress from the Site including storm water management structures and road maintenance as per any agreement with the County.

f. Prior to transporting any materials off-Site, submit Proof to NPS that the Board has reclassified the heap leach pad materials as Group C waste or as unregulated, contingent on processing the heap leach pad materials to meet Board-prescribed Standards.

g. Prior to transporting any materials off-Site, provide information to NPS that characterizes cyanide and lead levels and their bioavailability in the Final Product so that NPS may evaluate to what extent, if any, they may pose a threat to humans..

h. Prior to transporting any materials off-Site, propose to NPS final clean up levels for lead in soils in the Work Area assuming future recreational use of this area, utilizing total lead analysis (EPA method 6010), Toxicity Characteristics Leaching Procedure (EPA method 1311), and/or any other currently applicable procedure. In addition, 4EM must agree to meet cyanide and lead clean up levels determined by NPS and, at the discretion of NPS, must prepare a plan for the proper disposal and/or treatment of soil that contains cyanide and lead in concentrations exceeding those levels specified by NPS.

i. Prior to commencing any on-Site Work, provide information to NPS regarding potential impacts of the Work on other natural and cultural resources in the Mojave National Preserve ("Park"), including how artificial lights, dust and noise arising from the Work will be mitigated to minimize impacts on Park resources.

33. Work Plan(s): NPS may approve, disapprove, require revisions to, or modify the Work Plan(s) within the Statement of Work set forth in Attachment A. If NPS requires revisions, 4EM shall submit amendments to the Work Plan(s), containing such required revisions, within 30 days of receipt of notification of the required revisions. Respondents shall not commence any on-Site Work until NPS has approved the Work Plan(s) and shall not begin transporting material (including Final Product) off-Site until NPS has provided written approval for this activity. 4EM shall implement each component of the Work Plan(s) as approved in writing by NPS in accordance with the schedule approved by NPS. All Work required under the Work Plan(s) and any amendments shall be completed according to the schedule approved in the Work Plan(s). Once approved, or approved with modifications, the Work Plan(s), the schedule, and any subsequent modifications shall be fully enforceable under this Order. 4EM shall notify NPS at least 48 hours prior to performing any on-Site work pursuant to the approved Work Plan(s).

34. Health and Safety Plan: In accordance with the schedule in the Work Plan, and at least 90 days prior to implementing any on-Site activities, 4EM shall submit for NPS review and comment a plan that ensures the protection of all workers and the public health and safety during performance of on-Site Work and off-Site transport of all material. Specifically, the plan shall include proposed methods to monitor and protect workers from exposure to airborne contaminants, including, but not limited to, particulates and lead, which exceed any applicable regulatory standards. This plan shall be prepared in accordance with current EPA, NPS and State of California law and guidance on human health and safety. In addition, the plan shall comply with all current applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 C.F.R. Part 1910. 4EM shall incorporate all changes to the plan recommended by the NPS, and shall fully comply with the plan during the Removal Action.

35. Quality Assurance and Sampling: All sampling and analyses performed pursuant to this Order shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures and to any requirements that the Board may impose. Respondents shall use the QA/QC procedures described

in the EPA Region 9 "Sampling and Analysis Plan Guidance and Template, Version 2" March 2000. For long-term monitoring activities, EPA Order 5360.1, Change 1, 1998, requires that data collection activities conform to the requirements in American National Standard ANSI/ASQC E4-1994, *Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs*. A Quality Assurance Project Plan (QAPP) must be developed for the long-term monitoring activities planned. The EPA guidance documents, "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations," (EPA QA/R-5, Draft Final, October 1997), and "Guidance for Quality Assurance Project Plans" (EPA QA/G-5, February 1998) or any guidance that supersedes these documents shall be used when preparing the QAPP. These are available at www.epa.gov/quality1/qatools.html. (Also see, "Requirements for Non-EPA Organizations" at this website for a more complete discussion.) The QAPP is to be approved by NPS. To provide quality assurance and maintain quality control, the Respondents shall:

- i. Use only laboratories, including both on-Site and off-Site facilities, which have a documented Quality Assurance Program that complies with EPA guidance document EPA QA/R-5.
- ii. Ensure that the laboratory used by the Respondents for analyses performs according to a method or methods deemed satisfactory to NPS and submits all protocols to be used for analyses to NPS.
- iii. Ensure that NPS personnel and EPA's authorized representatives are allowed access to the laboratory and personnel utilized by the Respondents for analyses.
- iv. Install, operate and maintain material sampling and analytic equipment at the Work Area with the capability of providing confirmatory sampling that any materials, prior to being transported off-Site, meet the definition of Final Product. The confirmatory sampling plan, on-Site testing/analytic equipment and off-Site quality assurance laboratory facilities shall be shown to be in accordance/compliance with EPA guidance, with specifications in the SOW and as approved by NPS prior to installation and implementation.
- v. Submit a plan for the handling, treatment and/or disposal of any material that fails

to meet the definition of Final Product.

36. Monitoring and Confirmatory Sampling. Upon request by the NPS, 4EM shall have a laboratory analyze samples submitted by the NPS for quality-assurance monitoring. 4EM shall provide to the NPS the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or analysis. Upon request by the NPS, 4EM shall allow the NPS or its authorized representatives to take split and/or duplicate samples of any samples collected by 4EM while performing Work under this Order. The NPS shall have the right to take any additional samples that it deems necessary.

37. Post-Removal Site Control: In accordance with the Work Plan schedule, or as otherwise directed by the NPS, 4EM shall submit a proposal to the NPS, with copies to the Board, to DOC, and to the County, for post-removal Site controls consistent with section 300.415(l) of the NCP and OSWER Directive 9360.2-02. Upon receiving approval from NPS, 4EM shall implement such controls and shall provide the NPS, the Board, the DOC and the County, with documentation of all post-removal site control arrangements.

38. Post-Removal Reclamation: 4EM shall submit, as a component of the proposed Work Plan, a post-removal reclamation plan identifying measures to be taken in compliance with applicable state and federal law, including the California Surface Mining Reclamation Act of 1975, Cal. Pub. Res. Code § 2710, *et seq.*, federal mining reclamation regulations at 36 C.F.R. Part 9A, and all other applicable mine site reclamation law, for the Work Area. This proposed Reclamation Plan shall also be submitted to the County, and must be approved by NPS as well as by the County pursuant to SMARA prior to commencing on-Site Work.

39. Reporting: Consistent with the schedule set forth in the Work Plan(s), 4EM shall submit written progress reports to NPS concerning actions undertaken pursuant to this Order. These reports shall describe all significant developments during the preceding period, including the actions performed, elements of the Work Plan constructed and/or implemented and any problems

encountered, analytical data received during the reporting period, and the developments and construction anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems. The reports shall document the volume of material that did not meet the definition of Final Product and the method in which it was handled. The reports shall also set forth by truckload, the names and addresses of the transporting company and the truck driver, the truck identification number, the date and time shipped and received, the amount (weight or volume) of material shipped from the Site, means of shipping (bulk or container), its destination (including the names and addresses of customers/users), the uses of the Final Product, and the results of all sampling of such materials, by whomever it is performed. 4EM shall also provide, at least ten (10) days in advance, the names and locations of the customers/users other than concrete producers to whom the Final Product will be delivered and the intended use(s) of the Final Product. As to concrete producers, 4EM shall provide such information as soon as it becomes available. 4EM shall submit an annual summary on the effective date of this Order of all significant developments reported during the preceding year and provide anticipated production forecasts and an operating schedule for the subsequent annual period.

40. Respondents who claim any interest in any portion of the Site shall, at least 30 days prior to the conveyance of any such claim, give written notice that the Site is subject to this Order to the proposed transferee and written notice to NPS of the proposed conveyance, including the name and address of the proposed transferee. Respondents agree to require any successor claimant to comply with the immediately preceding sentence and to comply with Section IX (Site Access).

41. Within 60 days after completion of all Work required under the Work Plan and any amendments required by NPS as provided herein, 4EM shall submit for NPS review and approval a Final Report summarizing the actions taken to comply with this Order. The OSC may require additional reporting requirements for all work to be performed thereafter, including operation and maintenance and post-removal Site control. The Final Report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Order, a listing of

quantities and types of materials removed from the Site and handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the Removal Action, including manifests, shipping records, invoices, bills, contracts, subcontracts, project-related correspondence, and permits. The Final Report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

42. Waste Disposal: Any wastes disposed off-Site shall be in accordance with local, state and federal law (including CERCLA § 121(d)(3)) and regulations, and only after providing NPS with not less than 5 days written notice of any such proposed disposal, including the name and location of the facility proposed to be used for such disposal. This obligation shall include but not be limited to items such as general construction debris, any materials or items encountered within or below the heap leach pads and the PSP that do not qualify as Final Product, solvents and lubricants, paints, shipping materials, tires, and equipment maintenance consumables.

IX. SITE ACCESS

43. Respondents shall provide, and/or obtain, access to the Site and off-Site areas to which access is necessary to implement this Order. Such access shall be provided to NPS employees, its contractors, agents, consultants, designees, representatives, and to EPA and State of California representatives. Consistent with 4EM's established health and safety procedures for the Work Area, these individuals shall be permitted to move freely at the Work Area and appropriate off-

Site areas, as specifically approved by NPS, in order to conduct actions that NPS determines to be necessary.

44. NPS will provide access to Park lands to employees, contractors, agents, consultants, and representatives of the State of California and Respondents to the extent such access is necessary to implement this Order. NPS retains, however, all rights to condition or otherwise regulate such access as needed to manage affected public lands consistent with CERCLA and all applicable NPS requirements, policies, and procedures.

45. Notwithstanding any provision of this Order, DOI retains all of its access authorities and rights, including enforcement authorities related thereto, under CERCLA and any other applicable statutes or regulations.

X. ACCESS TO INFORMATION

46. Respondents shall provide to NPS, upon request, copies of all documents and information within their possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Order, including, but not limited to, any agreement between 4EM and VGC, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work and the Final Product. 4EM shall also make available to NPS, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work and the Final Product.

47. Respondents may assert business confidentiality claims covering part or all of the documents or information submitted to NPS under this Order to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 43 C.F.R. § 2.15. Documents or information determined to be confidential by NPS will be afforded the protection specified in 43 C.F.R. Part 2. If no claim of confidentiality accompanies documents or information when they are submitted, or if NPS has notified Respondents that the documents or

information are not confidential under the standards of Section 104(e)(7) of CERCLA or 43 C.F.R. Part 2, the public may be given access to such documents or information without further notice to Respondents.

48. Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If a Respondent asserts such a privilege in lieu of providing documents, it shall provide NPS with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Order shall be withheld on the grounds that they are privileged.

49. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, physical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

XI. RECORD RETENTION

50. Until 10 years after Respondents' receipt of NPS' notification pursuant to Section XXVIII (Notice of Completion of Work), Respondents shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in their possession or control or which come into their possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Respondents shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work until 10 years after Respondents' receipt of NPS' notification pursuant to Section XXVIII (Notice of Completion).

51. At the conclusion of this document retention period, Respondents shall notify NPS at least 90 days prior to the destruction of any such records or documents, and, upon request by NPS, Respondents shall deliver any such records or documents to the requesting agency. Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If a Respondent asserts such a privilege, it shall provide NPS with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Order shall be withheld on the grounds that they are privileged.

52. Each Respondent hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by NPS or the State regarding the Site and that it has fully complied with any and all NPS requests for information pursuant to Sections 104(e) of CERCLA, 42 U.S.C. § 9604(e).

XII. COMPLIANCE WITH OTHER LAWS

53. Respondents shall perform all actions required of them pursuant to this Order in accordance with all applicable local, state, and federal laws and regulations. All on-Site actions required pursuant to this Order shall attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Respondents shall identify proposed ARARs in the Work Plan, consistent with the Action Memorandum and the EE/CA, and upon approval of the Work Plan by NPS, shall comply with such ARARs.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

54. In the event of any action or occurrence during performance of the Work, which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, 4EM shall immediately take all appropriate action. 4EM shall take these actions in accordance with all applicable provisions of this Order, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. 4EM shall also immediately notify the NPS Project Coordinator and the OSC or, in the event of his/her unavailability, 4EM shall notify the EPA Emergency Response Office, Region IX, at (415) 947-4400, of the incident or Site conditions. In the event that 4EM fails to take appropriate response action as required by this Paragraph, and NPS or EPA takes such action instead, 4EM shall reimburse, as Future Response Costs, the federal agencies for all costs of the response action not inconsistent with the NCP pursuant to Section XIV (Reimbursement of Costs).

55. Nothing in the preceding Paragraph shall be deemed to limit any authority of the United States to take, direct, or order all appropriate action to protect human health and the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances on, at, or from the Site.

56. In addition, in the event of any release of a hazardous substance from the Site, 4EM shall immediately notify the NPS Project Coordinator, EPA's Emergency Response Office at (415) 947-4400 and the National Response Center at (800) 424-8802. 4EM shall submit a written report to NPS within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, not in lieu of, reporting under CERCLA section 103, 42 U.S.C. § 9603, and section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

XIV. REIMBURSEMENT OF COSTS AND RESTORATION FUND

57. VGC is liable for all Past Response Costs incurred by the United States through September 30, 2004 totaling \$1,016,707. Payment of Past Response Costs, including accrued interest on the unpaid balance, shall be made in installments by Respondent 4EM, on behalf of Respondent VGC, computed at \$1.00 per ton of Final Product sold in the preceding calendar year, within 30 days following the end of each such year. 4EM shall provide an audited annual financial statement supporting this calculation. If 4EM has not paid the total Past Response Costs set forth above, plus accrued interest, within eight years from the commencement of on-Site Work provided in Section VIII, it shall make a payment of any deficiency remaining.

58. Payment of Past Response Costs and of Future Response Costs shall be made using Electronic Funds Transfer ("EFT") in accordance with current EFT procedures to be provided to Respondents by NPS, and shall be accompanied by a statement identifying the name and address of the party(ies) making payment, and the name of the Morning Star Mine Site. Payment shall be made to the "DOI Central Hazardous Materials Fund" by wire transfer to: 021030004 TREAS NYC, Beneficiary - 14110008, referencing the Morning Star Mine Site. At the time of payment, 4EM shall send notice that the payment has been made to Esther Velasquez, National Business Center, BC-621 Collections and Billing Branch, Denver Federal Center - Building 50, P.O. Box 25047, Denver, CO 80225-0047, to the NPS Project Coordinator and to the NPS Regional Financial Management Officer, 1111 Jackson Street, Oakland, CA 94607. As all payments are made, Respondents shall notify, in writing:

Casey Scott Padgett
Office of the Solicitor, Department of the Interior
755 Parfet Street, Suite 151
Lakewood, CO 80215

And

Field Solicitor
Office of the Solicitor
1111 Jackson Street, Suite 735
Oakland, CA 94607

59. Respondents are liable for all Future Response Costs, as defined, which are not inconsistent with the NCP. Within forty-five (45) days of the effective date of this Order, respondent 4EM shall make an initial payment to NPS of \$75,000 as a deposit against which Future Response Costs will be charged. Thereafter, on an annual calendar year basis, NPS will send 4EM a bill for Future Response Costs, supported by a cost summary. 4EM shall, within 30 days of receipt of each bill, remit payment in an amount sufficient to replenish the \$75,000 deposit for Future Response Costs. Before entering into any contracts with outside consultants by which Future Response Costs would be incurred, NPS will discuss such proposed contracts with 4EM.

60. 4EM shall make payments, as provided below and in accordance with instructions to be provided separately, to the Natural Resource Damage Assessment and Restoration Fund ("NRDAR Fund") that will be available to NPS to restore, replace, or acquire the equivalent of those Park System Resources (as defined at 16 U.S.C § 19jj) that were injured by VGC and that will not be addressed as a part of the Work under this Order. Until the Removal Action has been completed, or until 4EM has paid a total of \$1,000,000, 4EM shall make a yearly contribution to the NRDAR Fund computed at \$0.75 per ton of Final Product sold in the preceding year within 30 days following the end of each such year. 4EM shall provide an annual audited financial statement supporting this calculation. If 4EM has not paid a total of \$1,000,000 within eight years from the commencement of on-Site Work provided in Section VIII, it shall make a payment to the NRDAR Fund of any deficiency to bring the total to \$1,000,000. NPS may withdraw amounts from the NRDAR Fund from time to time for the purpose of implementing such restoration activities.

61. In the event that any payment under Paragraphs 57 through 60 is not made within 30 days of the date when due, Respondents shall pay Interest on the unpaid balance. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section,

including but not limited to, payment of stipulated penalties pursuant to Section XVII of this Order.

62. A Respondent may dispute all or part of a bill for Future Response Costs submitted under this Order, if it alleges that NPS has made an accounting error or that a cost item is inconsistent with the NCP or this Order. If any dispute over costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Respondent shall pay the full amount of the uncontested costs to NPS as specified in this Section of this Order on or before the due date. Within the same time period, Respondent shall pay the full amount of the contested costs into an interest-bearing escrow account. Respondent shall simultaneously transmit a copy of both checks to the persons listed in Paragraph 58. Respondent shall ensure that the prevailing party or parties in the dispute shall receive the amount upon which they prevailed from the escrow account, including interest, within 10 days after the dispute is resolved.

XV. DISPUTE RESOLUTION

63. Unless otherwise expressly provided for in this Order, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Order. The parties to this Order shall attempt to resolve, expeditiously and informally, any disagreements concerning this Order.

64. If either Respondent objects to any action taken by NPS pursuant to this Order, including billings for Future Response Costs, such Respondent shall notify NPS in writing of its objection within 15 days of such action, unless the objection has been informally resolved. In disputing Future Response Costs bills, such Respondent shall identify any contested costs and the basis of its objection.

65. The NPS and the Respondent shall within 15 days from receipt of the Respondent's written objections attempt to resolve the dispute through formal negotiations ("Negotiation Period"). The Negotiation Period may be extended at the sole discretion of NPS. The NPS decision regarding an extension of the Negotiation Period shall not constitute an agency action subject to dispute resolution or a final agency action giving rise to judicial review.

66. Any agreement reached by NPS and the Respondent pursuant to this Section shall be in writing and shall, upon signature by the parties, be incorporated into and become an enforceable part of this Order. If the Respondent and NPS are unable to reach an agreement within the Negotiation Period, the Regional Director of the National Park Service, Pacific West Region will issue a written decision on the dispute to Respondent. The Respondent's obligations under this Order shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, the Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or, if there was no agreement, with the Regional Director's decision.

XVI. FORCE MAJEURE

67. Respondents agree to perform all requirements applicable to each of them under this Order within the time limits established under this Order, unless the performance is delayed by a force majeure. For purposes of this Order, a force majeure is defined as any event arising from causes beyond the control of Respondents or of any entity controlled by Respondents including, but not limited to, their contractors and subcontractors, that delays or prevents performance of any obligation under this Order despite Respondents' best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the Work, increased cost of performance, or inability to meet any standards set forth in the Action Memorandum, the approved Work Plan and any subsequent amendments to that Plan. Force majeure also does not include anything related to the presence, absence, concentration, or value of minerals in the tailings piles, the costs of extracting or concentrating such minerals, or anything that may affect the materials meeting the

definition of Final Product.

68. If any event occurs or has occurred that may delay the performance of any obligation under this Order, whether or not caused by a force majeure event, Respondent shall notify NPS orally within two hours of when Respondent first knew that the event might cause a delay. Within 5 days thereafter, Respondent shall provide to NPS in writing an explanation and description of the reasons for the delay, the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of force majeure for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

69. If NPS agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Order that are affected by the force majeure event will be extended by NPS for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If NPS does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, NPS will notify Respondent in writing of its decision. If NPS agrees that the delay is attributable to a force majeure event, NPS will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

XVII. STIPULATED PENALTIES

70. Respondents shall be liable to NPS for stipulated penalties in the amounts set forth in this Section for failure to comply with the requirements of this Order, as specified below, unless

excused under Section XVI (Force Majeure). "Compliance" by Respondents shall include completion of the activities under this Order or the Work Plan or any other plan approved under this Order identified below in accordance with all applicable requirements of law, this Order, the Work Plan, and any plans or other documents approved by NPS pursuant to this Order and within the specified time schedules established by and approved under this Order. Respondents shall pay any stipulated payments assessed under Paragraph 71, subsection iv, concerning annual amounts of Final Product to be removed, into an interest bearing escrow account approved by NPS, which will hold such amounts until eight years from the commencement of on-Site Work provided in Section VIII. NPS agrees that stipulated penalty amounts paid into this escrow account because of such missed deadlines shall be returned to 4EM if the Work is completed within eight years of the commencement of on-Site Work provided in Section VIII. 4EM agrees that if it has not completed the Work within eight years of commencement of on-Site Work provided in Section VIII, all amounts, including accumulated interest, in this escrow account shall be paid to NPS in accordance with instructions to be provided at that time.

71. The following stipulated penalties shall accrue per day for each "major milestone" that is missed or "significant violation" by 4EM, as set forth in this Paragraph:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$ 4,000	15th through 30th day
\$10,000	31st day and beyond

The "major milestones" and "significant violations" are as follows:

- i. sampling and analysis of all material before it leaves the Site to confirm that it meets "Final Product" definition,
- ii. adherence to sampling protocols,
- iii. delivery of "Final Product" only to those who will use it in accordance with risk assessment assumptions/conditions as set forth in the approved Work

Plan(s),

- iv. removal from the Site of the annual tonnage of Final Product set forth in the Work Plan(s),
- v. compliance with any mitigation measures required for ESA purposes,
- vi. Submittal of draft and revised Work Plans required by Paragraphs 32 and 33, within the times set forth in each of those Paragraphs, and
- vii. Timely payment of all Response Costs and amounts due to the NRDAR Fund, pursuant to Sections XIV.

72. The following stipulated penalties shall accrue per violation per day for failure to submit timely and adequate reports, plans, notices, information, certificates, assurances, or other written documents, including those required by Paragraphs 32 through 42, 46, 50 through 52, 54, 56, 58, 95, 96, 101, and 102:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 500	1st through 14th day
\$ 1,500	15th through 30th day
\$ 5,000	31st day and beyond

73. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: 1) with respect to a deficient submission under Section VIII (*Work to be Performed*), during the period, if any, beginning on the 31st day after NPS' receipt of such submission until the date that NPS notifies Respondents of any deficiency; and 2) with respect to matters disputed under Section XV (*Dispute Resolution*), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the NPS Regional Director issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Order.

74. Following a NPS determination that Respondents have failed to comply with a requirement of this Order, NPS may give Respondents written notification of the failure and describe the noncompliance. NPS may send Respondents a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether NPS has notified Respondents of a violation.

75. All penalties accruing under this Section, except for those penalties described in the following Paragraph, shall be due and payable to NPS within 30 days of Respondents' receipt from NPS of a demand for payment of the penalties, unless Respondents invoke the dispute resolution procedures under Section XV (Dispute Resolution). All payments to NPS under this Section shall be paid by certified or cashier's check(s) made payable to "DOI Central Hazardous Material Fund," shall indicate that the payment is for stipulated penalties, and shall be made in accordance with the notice provisions of Paragraph 58.

76. The payment of penalties shall not alter in any way Respondents' obligation to complete performance of the Work required under this Order.

77. Penalties shall continue to accrue during any dispute resolution period, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of the decision of the Regional Director of NPS.

78. If Respondents fail to pay stipulated penalties when due, NPS may institute proceedings to collect the penalties, as well as Interest. Respondents shall pay Interest on the unpaid balance, which shall begin to accrue on the date of any demand for payment of penalties. Nothing in this Order shall be construed as prohibiting, altering, or in any way limiting the ability of NPS to seek any other remedies or sanctions available by virtue of Respondents' violation of this Order or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to sections 106(b), 109 and 122(l) of CERCLA, 42 U.S.C. §§ 9606(b), 9609 and 9622(l), and punitive damages pursuant to section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3).

Notwithstanding any other provision of this Section of this Order, NPS may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued to it pursuant to this Order.

XVIII. COVENANT NOT TO SUE BY NPS

79. In consideration of the actions that will be performed and the payments that will be made by Respondents under the terms of this Order, and except as otherwise specifically provided in this Order, NPS covenants not to sue or to take administrative action against Respondents pursuant to sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for performance of the Work and for recovery of Past Response Costs and Future Response Costs. This covenant not to sue, as to Past Response Costs, shall take effect upon receipt by NPS of the full amount of Past Response Costs due under this Order and any Interest or Stipulated Penalties due for failure to pay Past Response Costs as required by this Order. This covenant not to sue as to Work and Future Response Costs shall take effect upon the complete and satisfactory performance by Respondents of their obligations under this Order, including, but not limited to, payment of all Future Response Costs and all amounts required to be paid to the NRDAR Fund. This covenant not to sue extends only to Respondents and is not intended to benefit any other person.

XIX. RESERVATION OF RIGHTS

80. Except as specifically provided in this Order, nothing herein shall limit the power and authority of DOI, or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent DOI or the United States from seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as they deem appropriate and necessary, or from requiring the Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law. DOI

and the United States reserve the right to bring an action against Respondents under section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of any response costs incurred by the United States related to this Order or the Site and not reimbursed under this Order or for any costs resulting from exacerbation by Respondents of existing contamination.

81. The covenant not to sue set forth in Section XVIII above does not pertain to any matters other than those expressly identified therein. The United States and DOI reserve, and this Order is without prejudice to, all rights against Respondents with respect to all other matters involving each of them, including, but not limited to:

- a. claims based on a failure by Respondents to meet an applicable requirement of this Order;
- b. liability for performance of response action other than the Work;
- c. criminal liability;
- d. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- e. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
- f. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

82. In the event NPS determines that 4EM has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner which may cause an endangerment to human health or the environment, or if 4EM fails to maintain the bonds or other financial security required by Paragraph 96, NPS may assume the performance of all or any portion of the Work as NPS determines necessary. 4EM may invoke the procedures set forth in Section XV (Dispute Resolution) to dispute an NPS determination that takeover of the Work is warranted under this Paragraph. Costs incurred by the United States in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondents shall pay pursuant to Section XIV

(Reimbursement of Costs and Escrow Fund). Notwithstanding any other provision of this Order, the DOI and the United States retain all authority and reserve all rights to take any and all response actions authorized by law.

XX. COVENANT NOT TO SUE BY RESPONDENTS

83. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Past Response Costs, Future Response Costs, or this Order, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the California Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

c. any claim against the United States pursuant to sections 107 or 113 of CERCLA, 42 U.S.C. §§ 9607 or 9613, relating to the Site.

84. Except as provided in Paragraph 92, these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraph 81, but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

85. Nothing in this Order shall be deemed to constitute approval or preauthorization of a claim within the meaning of section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXI. OTHER CLAIMS

86. By issuance of this Order, the United States and the NPS assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents. The United States and the NPS shall not be deemed a party to any contract entered into by the Respondents or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Order.

87. Except as expressly provided in Section XVIII (Covenant Not To Sue by NPS), nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against the Respondents or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or the common law, including, but not limited to, any claims of the United States for costs, damages and interest under sections 106(a) and 107(a) of CERCLA, 42 U.S.C. §§ 9606(a) and 9607(a).

88. This Order does not constitute a preauthorization of funds under section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2). The Respondents waive any claim to payment under sections 106(b), 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611, and 9612, against the United States or the Hazardous Substance Superfund arising out of any action performed under this Order.

89. No action or decision by DOI or the United States pursuant to this Order shall give rise to any right to judicial review except as set forth in section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXII. CONTRIBUTION PROTECTION

90. With regard to claims for contribution against Respondents for matters addressed in this Order, the Parties hereto agree that Respondents are entitled to protection from contribution actions or claims to the extent provided by section 113(f)(2) and 122(h)(4) of CERCLA, 42

U.S.C. §§ 9613(f)(2) and 9622(h)(4). For purposes of this Paragraph, the matters addressed in this Order are:

- a. NPS' Past Response Costs in connection with the Site;
- b. NPS' Future Response Costs in connection with this Order; and
- c. All costs of implementing the Work performed under this Order.

91. Nothing in this Order precludes the United States or the Respondents from asserting any claims, causes of action or demands against any persons not parties to this Order for indemnification, contribution, or cost recovery.

XXIII. INDEMNIFICATION

92. Each Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions by it and its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Order. In addition, each Respondent agrees to pay the United States all costs incurred by the United States including, but not limited to, attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of that Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Order. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondents in carrying out activities pursuant to this Order. Neither Respondents nor any such contractor shall be considered an agent of the United States.

93. The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

94. Respondents waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

XXIV. INSURANCE

95. At least 7 days prior to commencing any on-Site Work under this Order, 4EM shall secure, and shall maintain for the duration of this Order, comprehensive general liability insurance and automobile insurance with limits of three million dollars, professional and contractors pollution liability insurance with limits of three million dollars, combined single limit naming the United States and its employees as additional insureds. Within the same time period, 4EM shall provide NPS with certificates of such insurance and a copy of each insurance policy. If 4EM demonstrates by evidence satisfactory to NPS that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then 4EM need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXV. FINANCIAL ASSURANCE

96. In accordance with the schedule set forth in the Work Plan and no less than 90 days prior to commencing on-Site work, 4EM shall establish and maintain financial security in the amount of \$1,097,407, by posting performance and payment surety bonds or some other financial assurance.

instrument approved by NPS, guaranteeing performance of the Work. The bonds and the bond terms, or other financial assurance instrument, shall be approved by NPS prior to execution by Respondents, and the bonds or financial assurance instrument shall name NPS as the obligee. The bonds shall be kept in place until the Work to be performed in Section VIII has been fully implemented and all payments required by Section XIV have been made. As provided by California law, the RWQCB, DOC and County may be named as secondary beneficiaries of the financial security to the extent their respective requirements are part of the Work. In the event that NPS, or another agency, assumes performance of a portion or of all the Work pursuant to Paragraph 82, it may draw on the bonds or other financial security required by Section XXV.

97. If, after the Effective Date, 4EM can demonstrate to the NPS that the estimated cost to complete the remaining Work has diminished below the amount set forth in the preceding Paragraph 96 and all payments are current, 4EM may, on any anniversary date of the financial assurance, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. 4EM shall submit a proposal for such reduction to NPS, in accordance with the requirements of this Section, and may reduce the amount of the security only upon approval by NPS. If the NPS-approved engineer's cost estimate for the Work exceeds the amount set forth in the preceding Paragraph, NPS may require 4EM to increase within 30 days the amount of the security to equal the estimated cost of the remaining Work to be performed. In the event of a dispute, 4EM shall increase or may reduce the amount of the security in accordance with the written decision resolving the dispute, within 30 days of receipt of such decision.

XXVI. MODIFICATIONS

98. Modifications to the SOW, the Work Plan, or any schedule may be made in writing by mutual agreement of the parties.

99. If 4EM seeks permission to deviate from any approved Work Plan or schedule or the Statement of Work, 4EM's Project Coordinator shall submit a written request to the Project Coordinator and the OSC outlining the proposed Work Plan modification and its basis.

100. No informal advice, guidance, suggestion, or comment by NPS regarding reports, plans, specifications, schedules, or any other writing submitted by 4EM shall relieve 4EM of its obligations to obtain such formal approval as may be required by this Order, and to comply with all requirements of this Order unless it is formally modified.

XXVII. ADDITIONAL REMOVAL ACTION

101. If NPS determines that additional removal actions not included in an approved plan are necessary to protect public health, welfare, or the environment, NPS will notify Respondents of that determination. Unless otherwise stated by NPS, within 30 days of receipt of notice from NPS that additional removal actions are necessary to protect public health, welfare, or the environment, Respondents shall submit for approval by NPS a Work Plan for the additional removal actions. However, if 4EM contends that its actions have not contributed to the condition(s) that have caused NPS to determine that additional removal actions are necessary, then it must notify NPS of this contention within 10 days of the receipt of notice from NPS and the provisions of Section XV (Dispute Resolution) shall apply. The Work Plan for additional removal actions shall conform to the applicable requirements of Section VIII (Work to Be Performed) of this Order. Upon NPS approval of the plan, Respondents shall implement the plan for additional removal actions in accordance with the provisions and schedule contained therein. NPS reserves the right to conduct any work itself at any point, to seek reimbursement from Respondents, and/ or to seek any other appropriate relief.

XXVIII. NOTICE OF COMPLETION

102. When NPS determines, after NPS review of all Final Reports, that the Removal Action has been fully performed in accordance with this Order, with the exception of any continuing obligations required by this Order, including continued operation and maintenance of a treatment system for the adit and tailings containment system, as well as post-removal Site controls and record retention, NPS will provide notice to the Respondents. If NPS determines that any aspect of the Removal Action has not been completed in accordance with this Order, NPS will notify the Respondents, provide a list of the deficiencies, and require that 4EM modify the Work Plan if appropriate in order to correct such deficiencies. 4EM shall implement the modified Work Plan, as approved by NPS, and shall submit a modified Final Report in accordance with the NPS notice. Failure by 4EM to implement the approved modified Work Plan shall be a violation of this Order.

XXIX. SEVERABILITY

103. If a court issues an order that invalidates any provision of this Order or finds that Respondents have sufficient cause not to comply with one or more provisions of this Order, Respondents shall remain bound to comply with all provisions of this Order not invalidated or determined to be subject to a sufficient cause defense by the court's order.

104. This Order and its appendices constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Order. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Order.

XXX. INCORPORATION BY REFERENCE

105. The following are incorporated into and are enforceable parts of this Order:

EE/CA and Action Memorandum

Statement of Work (Attachment A)

Work Plan(s)

XXXI. EFFECTIVE DATE

107. This Order shall be effective 10 days after the Order is signed by both NPS and the United States Department of Justice. The undersigned representative of each Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Order and to bind that Respondent to this document.

[SIGNATURES ON NEXT PAGE]

Agreed this 5 day of January, 2005

Vanderbilt Gold Corporation:

By: _____

Title: President

Agreed this 31 day of December, 2004.

Mineral, Metal & Mining Management, Ltd., a Nebraska Limited Partnership

By: Mineral, Metal & Mining Management Company, General Partner

By: _____

Title: President

It is so ORDERED and Agreed this 22 day of March, 2005

By: _____

Sue E. Masica

Associate Director

Park Planning, Facilities and Lands

National Park Service

By: _____

Michael Soukup

Concur

Associate Director

Natural Resources Stewardship and Science

National Park Service

By: _____

Daniel Shillito

Regional Solicitor

Department of the Interior

By: _____

W. Benjamin Fisherow

Deputy Chief

Environmental Enforcement Section

Environment and Natural Resources Division

Department of Justice

ATTACHMENT A

STATEMENT OF WORK (SOW)

4EM REMOVAL PROJECT – MORNING STAR MINE SITE

I. SITE HISTORY AND BACKGROUND

The Morning Star Mine Site contains an inactive open pit gold mine. The open pit and related waste dumps, heap leach operations, and facilities are located on the eastern slope of the Ivanpah Mountains in Section 28 of Township 15 North, Range 14 East, San Bernardino Baseline and Meridian in the Mojave National Preserve. Approximately 3-1/2 miles of unpaved roads provide access to the Site, across public land managed by the NPS. The two heap leach pads and pregnant solution pond at the Morning Star Mine Site, which are addressed in this Order, are located on unpatented lode mining claims currently held by Respondent, Vanderbilt Gold Corporation ("VGC Claim"). Mineral, Metal & Mining Management Company ("4EM") has leased the heap leach pads which are the subject of this SOW from VGC, with the right to occupy other portions of the VGC Property for operations as described in this SOW.

The mine was initially operated as an underground mine, producing high-grade ore that was processed off site. In 1984, the method of mining and processing was changed to an onsite heap leach pad system. This system consisted of a lined heap leach pad (Pad No. 1) that drained to a lined pregnant solution pond, and a gold recovery facility that included carbon columns. Pad number 1 is roughly 15 acres in size and contains approximately 1,215,171 tons of material. In 1989, a second heap leach pad (Pad No. 2) was constructed. This pad was constructed with a modified solution storage and collection system integrated into the bottom of the pad (no gravity drain). Pad No. 2 is roughly 13 acres in size and contains approximately 545,177 tons of material.

Meteoric inflow continually added to the volume of solution impounded by liner within Pad No. 2, with the cessation of processing operations in 1992. The solution level within Pad No. 2 rose and overtopped the liner at several locations following precipitation events. Furthermore, it was observed that the liner for the pregnant pond solution was no longer competent. In addition, erosion failures of the steep slopes associated with the heap leach pads were observed. The potential for these erosion failures to grow and lead to failures within the heap leach pads was considered "high".

Water samples were collected from the bottom of the open pit, Pad No. 1, the pregnant solution pond, the leak detection system for the pregnant solution pond, the leachate collection system and leak detection system from Pad No. 2, and standing water on the perimeter of Pad No. 2. Analyses confirmed that water from the vicinity of the two pads and leachate contained within the pads exceeded the Regional Water Quality Control Board (RWQCB) discharge limits for total cyanide or weak acid dissociable (WAD) cyanide. The maximum concentration of total cyanide detected in surface water was 8.9 milligrams per liter; while the RWQCB's discharge limit was 1.0 milligrams per liter. The maximum concentration of WAD cyanide detected in surface water was 2.1 milligrams per liter; while the RWQCB's discharge limit was .2 milligrams per liter.

The analyses of soil samples indicated elevated levels of total and WAD cyanide, beryllium, cadmium, chromium, cobalt, copper, lead, molybdenum, and zinc. However, lead was the only soil contaminant present at concentrations in excess of regulatory standards. The maximum concentration of lead detected

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in soil was 1,160 milligrams per kilogram (the California total threshold limit concentration is 1,000 milligrams per kilogram). NPS determined that conditions involving the threatened release of cyanide solutions constituted an imminent and substantial endangerment to public health, welfare, or the environment within the meaning of sections 104(a)(1) and 106(a) of CERCLA, 42 U.S.C. §§ 9604(a)(1) and 9606(a), and implemented a removal action in 2002. The Morning Star Mine is not listed or proposed for listing on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B.

II. PURPOSE – OVERVIEW

This Statement of Work defines the objectives and scope of work that are involved in fulfilling the requirements of the Administrative Order on Consent. The purpose of the work described herein is to develop and implement a response action to address the release or threat of release of hazardous substances at the Site through the detoxification and removal of reclassified heap leach material for sale off the mine site, as a pozzolan product. The heap leach pads and solution storage pond disturbance areas will be reclaimed, recontoured, and revegetated upon completion of removal of the pad material. U.S. Department of the Interior National Park Service (NPS) prepared an Action Memorandum specifying that the mitigation/reclamation of the site by detoxification, reclassification, crushing, processing, and hauling all heap leach pad material off site by utilizing the material as a beneficial reuse product (pozzolan) in cement is the Preferred Alternative for long-term cleanup of the hazards to human health and the environment represented by the Site. This includes the detoxification and reclassification of heap leach material from Group B mining waste to Group C or unregulated mining waste through treatment and subsequent sampling and verification procedures reviewed and approved by the Regional Water Quality Control Board, Lahontan Region. Work required includes detoxification and reclassification of the liquid and solid fractions of the material contained within the two heap leach pads and solution storage pond. Upon verification of detoxification and reclassification of the mining waste by the Regional Water Quality Control Board, Lahontan Region, the Respondent proposes to beneficially reuse the heap leach material as an additive to cement. The material will be crushed, processed, sampled, analyzed for compliance with the criteria identified in Section III.C of this Statement of Work, and as established in accordance with Paragraph 32 of the Administrative Order on Consent, prior to removal off site.

The Respondent shall prepare and submit to the U.S. Department of the Interior, National Park Service for amendment and approval a Work Plan(s), consistent with this SOW, describing in detail how the Respondent shall implement the beneficial reuse of the heap material, how the work will be performed, and how removal action criteria such as methods of detoxification and reclassification, schedules, and personnel responsibilities will be determined.

The Work Plan(s) required may be amended and/or supplemented by subsequent Plans submitted to the NPS for review and approval before implementation.

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III. REMOVAL ACTION WORK PLAN

The respondent shall prepare and submit to the NPS a draft Work Plan, which may be in one or more parts. The Work Plan must include at a minimum the following elements:

A. PROJECT OVERVIEW

1. Background
2. ARARS

A preliminary list of ARARs has been identified in the EE/CA. Respondent shall provide a list of specific ARARs in the Work Plan that will address the scope of its removal action. The Respondent must specify in the Work Plan how the applicable or relevant and appropriate requirements (ARARs) will be complied with during and after the implementation of the Removal Action to the extent practicable under the exigencies of the situation and within the scope of this action. The Respondent shall also provide the means by which it intends to meet the obligations as described in Section VIII (Work to be Performed) of the AOC.

B. PROJECT MANAGEMENT

1. Personnel - The Work Plan must identify the key personnel with 4EM and its prime contractor(s) managing the project.
2. Project Schedule

C. OPERATIONS

1. Mobilization plan
 - a. Personnel
 - b. Equipment - The Work Plan must also identify specific equipment required to meet construction specifications
 - c. Facilities
 - d. Work areas
 - e. Project maps

4EM shall provide descriptions, including maps, of the Site and the work areas, utility corridors, fueling areas, and maintenance areas. Plan maps shall delineate the leased area and claim areas. Facilities outside of the leased area to be used by 4EM (the valley wells and pipeline, well access road, and the site access road) shall be indicated.

2. Safety and Security

- a. Personnel certification
- b. Health and Safety Plan - must conform to OSHA Standards 29 CFR 1910.120 App. C
- c. Site security

Security shall be maintained at the Site and the work plan must describe in general the plans for maintaining security. NPS employees and their representatives and contractors will have access to the site at all times during this project. The purpose for access may include but not be limited to implement reclamation activities at other locations on the Site and to conduct inspection of this Action.

- d. Decontamination

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Methods to protect human health and the environment must be addressed. Liquids and solid material exceeding waste discharge limits shall not be transported or tracked off lined containment. Decontamination procedures for personnel on-site shall be addressed in this section. Decontamination procedures for all equipment used on-site shall be listed. Disposal of decontamination materials shall be addressed. Criteria for release of equipment off-site shall be addressed.

3. Leach pile detoxification

- a. Procedures
- b. Sampling – describe here and include details in Site Sampling and Analysis Plan

The purpose for the drilling program on the heap leach pads is to determine the effectiveness of the cyanide detoxification program for the solid and liquid fraction of the pads. In addition to inclusion in the Site Sampling and Analysis, Plan 4 EM shall develop and submit a work plan to the Lahontan Regional Water Quality Control Board for approval.

4. Declassification procedure

5. Leach Pile Rock Processing

- a. Procedures
- b. Engineering controls

Controls that assure no release of materials or contaminants to the work area and/or off-site occurs shall be addressed in this section. Measures for stabilization and erosion control will be implemented as necessary to prevent slope failures or material migration off-site prior to implementing the removal action.

- 1. Containment
 - 2. Dust suppression
 - 3. Erosion control
 - 4. Storm water management
 - 5. Quality assurance - Engineering testing methods, procedures and frequencies must be described in the Work Plan.
- c. Sampling – describe here and include details in a Site Sampling and Analysis Plan

Respondent shall include plans for continuous sampling of crushed product prior to shipment off site in the Site Sampling Plan including:

- Lifetime of the project;
- Rate of production on a biweekly or monthly basis, based on any computed data; and
- Frequency of shipment.

The product stream is to be sampled using a sampling rate, schedule and technique to verify the nature of material being hauled off site as a Group C or unregulated material for sale off the mine site. 4EM shall use either an automatic sampling device or collect grab samples at a designated sampling port. 4EM shall identify the specific constituents that will be analyzed and indicate their respective analytical technique and their

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respective levels of detection. Additionally, 4EM shall make provisions for sending samples to an approved off-site laboratory at a regular interval for quality control purposes and to determine the accuracy of on-site analytical methods. The frequency for off-site laboratory samples and the frequency for analyzing blanks will be approved by the NPS.

If field test kits are to be used to indicate the presence of cyanide, 4EM must indicate the field test kit intended for use, and also indicate the method used for cyanide quantification. 4EM must provide product literature and adequate documentation to justify its field kit selection process. 4EM must make provisions for sending samples to an off-site laboratory for analysis of samples at a regular interval, acceptable to the NPS.

The Removal Action Continuous Sampling Program shall include human health-based criteria for cyanide and the Title 22 metals, which shall be based on exposure to the pozzolan product during handling and use at a concrete batch plant or after incorporation into concrete. The Removal Action Continuous Sampling Program shall include provisions for the handling of crushed product that fails to meet the human health-based criteria for cyanide or the Title 22 metals. This contingency plan shall describe how the product stream will be diverted, handled and redirected for either additional treatment or appropriate disposal.

6. Materials Handling and Storage

Areas designated for temporary stockpiling of materials, vehicle maintenance areas, and product storage areas shall be identified. Maps depicting haul routes, stockpile areas, work areas, etc. shall be provided.

7. Site Traffic and Transportation

Off-site transportation and destination(s) information of reclassified material must be provided to the NPS 10 days prior to delivery, shipping or hauling. Off-site road conditions, intermittent repairs, and post-project repair of roads utilized by 4EM are the responsibility of 4EM.

Routing from the Site through the Mojave National Preserve shall be identified in the Work Plan. Any required permits, including operating restrictions and requirements, shall be obtained from the appropriate agency(ies). 4EM shall submit documentation from San Bernardino County regarding use and maintenance of roads maintained by the County.

- a. Site Traffic Plan
- b. Site Transportation Plan

8. Processed Material Reuse Plan

9. Leachate and Leachate Liner Processing

Method of materials handling for leachate and heap leach pad materials prior to, during treatment, and following detoxification must be described. This section shall include declassification

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handling methods and equipment to be used for material loading, moving, crushing, separating, transferring, loading for transport, and weighing.

- a. Removal
- b. Sampling – describe here and include details in Site Sampling and Analysis Plan
- c. Disposal

The plan shall describe the name and location of RCRA facilities to be used for off-site disposal of pad and pond liners and other debris generated as a result of this Action

1. Pretreatment
2. Disposal facilities

D. QUALITY ASSURANCE

The Site Quality Assurance Project Plan and Site Sampling and Analysis Plan must conform to Paragraph 35 of the Administrative Order on Consent and to EPA guidelines for Quality Assurance Plan and Sampling Plan preparation. EPA Region 9 Guidance may be found on the web at: www.epa.gov/region9/qa/fieldsamp.html National Guidance at: www.epa.gov

1. Site Quality Assurance Project Plan (QAPP)

A Quality Assurance Plan will be developed for the Leach Pad Drilling Program and the Removal Action Continuous Sampling Program and the Post-Operation Sampling and Remediation. The Quality Assurance Plan will include Data Quality Objectives (EPA Guidance: G-4 Guidance for Developing Data Quality Objectives for Environmental Sampling) for each sampling scheme and statistical methods for the assessment of the data collected.

2. Site Sampling and Analysis Plan – include post-detoxification sampling, leachate sampling, continuous product sampling, post-operation sampling.

E. POST-OPERATION ACTIVITIES

The purpose of post-operation sampling is to determine the nature and extent, if any, of contamination remaining under the footprint of the heap leach pads and pregnant solution pond. Respondent shall include post-removal sampling in the Site Sampling and Analysis Plan including location, schedule and rationale for sampling soil and groundwater. Respondent shall submit a work plan to address contingency measures if contamination is found at the conclusion of operations. The work plan shall include soil and groundwater action levels and handling/disposal methods reflecting the results of analyses. Constituents of concern include, but are not limited to, As, Cd, Pb, Total and WAD cyanide.

1. Leach pad sampling – describe here and include details in a Site Sampling and Analysis Plan.

Soils within the disturbance footprint of the two heap leach pads and pregnant solution pond must be investigated for the presence of cyanide and other chemicals of concern identified previously after removal of their liners but before initiation of reclamation. 4EM shall include a sampling protocol for these disturbance areas in addition to the other sampling programs identified in the Site Sampling and Analysis Plan. The sampling protocol will identify the contaminants to be

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analyzed, soil screening levels, anticipated sample locations and depths and a contingency plan if soil screening levels are not met.

2. Remediation Work Plan

3. Disposal

- a. Pretreatment
- b. Disposal facilities

4. Restoration

- a. Grading
- b. Erosion control
- c. Revegetation

5. Operation and Maintenance Plan for Restoration Measures

Respondent shall also provide a management plan for the use and decommissioning/abandonment of existing water supply wells used for the project, utilities, and operational facilities.